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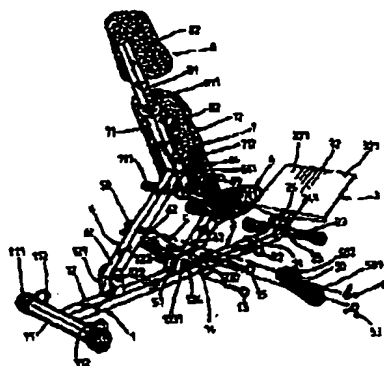
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权利要求书2页 说明书6页 附图页数10页

[54]实用新型名称 健身器新型结构

[57]摘要

一种健身器新型结构,由底座、尾支架、脚踏座、座垫、支撑架、后支架、背靠垫、头靠垫等构件所组成,使用者达到背部、腰部、臀部与腿部肌肉等相关部位的运动效果,使用者尾支架可调整长度,头靠垫可调整高低,相当方便,只须拔出销钉即可折叠收合,收合后的体积小,便于储放、包装、运输;底座的两侧可配合钩设一橡胶拉力绳,令使用者可双手握持该拉力绳的把手配合做各种姿势的运动。



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## 权利要求书

1、一种健身器新型结构，其特征是它包括有：

一底架，其一侧具有轴杆，该轴杆的两侧各枢设活动轮，由该轴杆中间向前垂直延设一主支杆，该主支杆的前侧则套设一尾支架，并藉调整杆予以插接定位，且该主支杆的一侧具有一U形座可藉枢轴与后支架下方枢接，另外该主支杆上方另预设一枢接座，该枢接座的一侧可藉由枢轴与支撑架的下方枢接，并预设定位孔可藉由插销穿设该枢接座与支撑架，且该枢接座的另一侧另藉枢轴与座垫的支杆下方枢接，并另预设有定位孔可藉由插销穿设该枢接座与座垫的支杆；

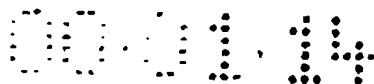
一尾支架，系一侧具有若干定位孔可套入底架的主支杆前侧内部适当长度，再藉调整杆选择穿设前述其中之一定位孔而穿设定位，而该尾支架的另一侧具有横杆，且在尾支架后侧上方另设有两枢接壁，藉由枢接壁，预设的若干角度排列的定位孔可选择其中之一藉由插销将脚踏座的支杆下方定位；

一脚踏座，其下方具有一支杆可藉插销选择与尾支架的两枢接壁所设其中之一定位孔插设定位，而该脚踏座上方则为具有适当面积的踏板以供使用者选择适当部位踩踏施力；

一座垫，其下方具有适当角度的支杆，藉该支杆下方与底支架的枢接座的另一侧枢接，且支杆并另藉插销与该枢接座另一侧穿设定位，令该座垫的支杆被定位形成适当角度；

一支撑架，系下方藉枢轴与底架的枢接座一侧枢接，该支撑架并另开设定位孔可藉插销与该枢接座一侧穿设定位，令该支撑架形成一适当角度，另外该支撑架上方两侧并具有定位杆可分别供套设弹性元件的一侧，并藉弹性卡夹予以定位；

一后支架，系下方与底架的主支杆的U形座枢接，而其上方则藉枢



接壁的穿孔可利用插销与背靠垫的固定杆穿设定位，且其上方两侧具有定位杆可分别与弹性元件的另一侧套设定位，并藉弹性卡夹予以定位；

一背靠垫，其前侧具有靠垫，而后侧连结一固定杆，该固定杆的下方两侧分别延设有把手杆，且固定杆另藉枢轴与后支架上方枢接，并另藉插销穿过后支架的枢接壁而与后支架穿设连接定位，相对令背靠垫形成适当的角度；

一头靠垫，其前侧为头垫，而后侧连结一支杆，该支杆预设若干穿孔可套入背靠垫的固定杆上方内部预定长度，再藉调整杆选择其中之一穿孔而穿设定位。

2、根据权利要求 1 所述的健身器新型结构，其特征在于该底架的轴杆两侧适当部位预设有定位环，可配合钩设一橡胶拉力绳的挂勾，令使用者双手握持该拉力绳的把手可配合做各种姿势的运动。

# 说明书

## 健身器新型结构

本实用新型系一种健身器新型结构，可提供具有背部、腰部、臀部、腿部肌肉等相关部位的运动效果，且其可方便地调整适应不同使用者的需求，而欲折叠收合时不须工具，只须拔出插销即可，相当方便，收合后体积小，便于储放或包装运输。

相关的习用产品如图 1 所示，此种健身器 9 系提供使用者以仰躺或其他姿势运动，其缺点为使用者与健身器并无互动关系，仅由姿势变换而产生运动效果，其运动的部位亦较小，运动时也缺乏适当的运动阻力。

有鉴于此，本实用新型的目的是提供一种健身器新型结构，使用者可以背部、腰部、腿部、臀部等相关部位同时作伸展与弯曲运动，能配合运动阻力以达到较佳的运动效果，使用调整方便，健身器折叠收合方便。

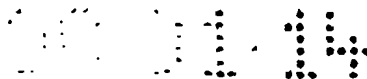
本实用新型的目的是这样实现的：一种健身器新型结构，其特征是它包括有：一底架，其一侧具有轴杆，该轴杆的两侧各枢设活动轮，由该轴杆中间向前垂直延设一主支杆，该主支杆的前侧则套设一尾支架，并藉调整杆予以插设定位，且该主支杆的一侧具有一 L 形座可藉枢轴与后支架下方枢接，另外该主支杆上方另预设一枢接座，该枢接座的一侧可藉由枢轴与支撑架的下方枢接，并预设定位孔可藉由插销穿设该枢接座与支撑架，且该枢接座的另一侧另藉枢轴与座垫的支杆下方枢接，并另预设有定位孔可藉由插销穿设该枢接座与座垫的支杆；一尾支架，系一侧具有若干定位孔可套入底架的主支杆前侧内部适当长度，再藉调整杆选择穿设前述其中一定位孔而穿设定位，而该尾支架的另一侧具有横杆，且在尾支架后侧上方另设有两枢接壁，藉由枢接壁，预设的若干



角度排列的定位孔可选择其中之一藉由插销将脚踏座的支杆下方定位；一脚踏座，其下方具有一支杆可藉插销选择与尾支架的两枢接壁所设其中之一定位孔插设定位，而该脚踏座上方则为具有适当面积的踏板以供使用者选择适当部位踩踏施力；一座垫，其下方具有适当角度的支杆，藉该支杆下方与底支架的枢接座的另一侧枢接，且支杆并另藉插销与该枢接座另一侧穿设定位，令该座垫的支杆被定位形成适当角度；一支撑架，系下方藉枢轴与底架的枢接座一侧枢接，该支撑架并另开设定位孔可藉插销与该枢接座一侧穿设定位，令该支撑架形成一适当角度，另外该支撑架上方两侧并具有定位杆可分别供套设弹性元件的一侧，并藉弹性卡夹予以定位；一后支架，系下方与底架的主支杆的U形座枢接，而其上方则藉枢接壁的穿孔可利用插销与背靠垫的固定杆穿设定位，且其上方两侧具有定位杆可分别与弹性元件的另一侧套设定位，并藉弹性卡夹予以定位；一背靠垫，其前侧具有靠垫，而后侧连结一固定杆，该固定杆的下方两侧分别延设有把手杆，且固定杆另藉枢轴与后支架上方枢接，并另藉插销穿过后支架的枢接壁而与后支架穿设连接定位，相对令背靠垫形成适当的角度；一头靠垫，其前侧为头垫，而后侧连结一支杆，该支杆预设若干穿孔可套入背靠垫的固定杆上方内部预定长度，再藉调整杆选择其中之一穿孔而穿设定位；该底架的轴杆两侧适当部位预设有定位环，可配合钩设一橡胶拉力绳的挂勾，令使用者双手握持该拉力绳的把手可配合做各种姿势的运动。

本实用新型的优点是：

- 1、使用者可坐于座垫上方而背部倚靠背靠垫，头部则靠在头靠垫，而双脚或单脚踩踏于脚踏座的踏板上方预定部位，双手并分别握持把手杆，随即可双脚向后蹬而背部向后仰躺，令背靠垫以其连接的后支架下方枢轴为支点向后枢转并配合后支架的两定位杆连动拉伸弹性元件而同时给予适当的运动阻力，进而达到背部、腰部、臀部与腿部筋肉等相关



部位的运动效果。

2、不须使用工具，只要将各插销拔出即可方便地收合折叠，且收合后的体积小，便于储放、包装或运输。

3、尾支架的长度，头靠垫的高低位置皆可方便地配合不同使用者的需求而调整。

4、底架的两侧可配合钩设一橡胶拉力绳，使用者双手握持该拉力绳的把手可配合做各种姿势的运动。

下面结合附图对本实用新型作进一步说明。

图1是习用产品的立体图。

图2是本实用新型实施例的部分构件分解图。

图3是本实用新型实施例的立体图。

图4是本实用新型实施例的另一角度立体图。

图5是本实用新型实施例的折叠收合后的立体图。

图6是本实用新型实施例的使用状态立体参考图。

图7是本实用新型实施例的另一使用状态立体参考图。

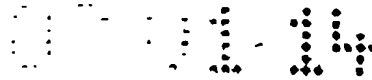
图8是本实用新型实施例的另一使用状态立体参考图。

图9是本实用新型实施例的另一使用状态立体参考图。

图10是本实用新型实施例的另一使用状态立体参考图。

如图2至图10所示，本实用新型一种健身器新型结构，系包括有：

一底架1，其一侧具有轴杆11，该轴杆11的两侧各枢设活动轮111，由该轴杆11中间向前垂直延设一主支杆12，该主支杆12的前侧则套设一尾支架2，并藉调整杆22予以插接定位，且该主支杆12的一侧具有一U形座121可藉枢轴122与后支架6下方枢接，另外该主支杆12上方另预设一枢接座123，该枢接座123的一侧可藉由枢轴124与支撑架5的下方51枢接，并预设定位孔1231可藉由插销13穿设该枢接座123与支撑架5，且该枢接座123的另一侧另藉枢轴14与座垫4的支杆41下方枢接，



并另预设有定位孔 1232 可藉由插销 15 穿设该枢接座 123 与座垫 4 的支杆 41;

一尾支架 2, 系一侧具有若干定位孔 21 可套入底架 1 的主支杆 12 前侧内部适当长度, 再藉调整杆 22 选择穿设前述其中之一定位孔 21 而穿设定位, 而该尾支架 2 的另一侧具有横杆 23, 且在尾支架 2 后侧上方另设有两枢接壁 24, 藉由枢接壁 24, 预设的若干角度排列的定位孔 241 可选择其中之一藉由插销 25 将脚踏座 3 的支杆 31 下方定位;

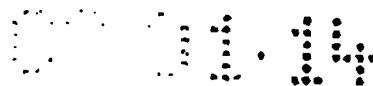
一脚踏座 3, 其下方具有一支杆 31 可藉插销 25 选择与尾支架 2 的两枢接壁 24 所设其中之一定位孔 241 插设定位, 而该脚踏座 3 上方则为具有适当面积的踏板 32 以供使用者选择适当部位踩踏施力;

一座垫 4, 其下方具有适当角度的支杆 41, 藉该支杆 41 下方与底支架 1 的枢接座 123 的另一侧枢接, 且支杆 41 并另藉插销 15 与该枢接座 123 另一侧穿设定位, 令该座垫 4 的支杆 41 被定位形成适当角度;

一支撑架 5, 系下方 51 藉枢轴 124 与底架 1 的枢接座 123 一侧枢接, 该支撑架 5 并另开设定位孔 511 可藉插销 13 与该枢接座 123 一侧穿设定位, 令该支撑架 5 形成一适当角度, 另外该支撑架 5 上方两侧并具有定位杆 52 可分别供套设弹性元件 50 的一侧 501, 并藉弹性卡夹 53 予以定位;

一后支架 6, 系下方 61 与底架 1 的主支杆 12 的 L 形座 121 枢接, 而其上方则藉枢接壁 64 的穿孔 641 可利用插销 73 与背靠垫 7 的固定杆 71 穿设定位, 且其上方两侧具有定位杆 62 可分别与弹性元件 50 的另一侧 502 套设定位, 并藉弹性卡夹 63 予以定位;

一背靠垫 7, 其前侧具有靠垫 72, 后侧连结一固定杆 71, 该固定杆 71 的下方两侧分别延设有把手杆 711, 且固定杆 71 乃另藉枢轴 712 与后支架 6 上方枢接, 并另藉插销 73 穿过后支架 6 的枢接壁 64 而与后支架 6 穿设连接定位, 相对令背靠垫 7 形成适当的角度;

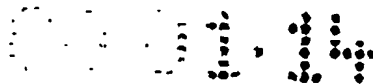


一头靠垫 8，其前侧为头垫 82，而后侧连结一支杆 81，该支杆 81 预设若干穿孔 811 可套入背靠垫 7 的固定杆 71 上方内部预定长度，再藉调整杆 83 选择其中之一穿孔 811 而穿设定位；

是以，藉由上述构件的组成，使用者可坐于座垫 4 上方，背部倚靠在背靠垫 7，头部则靠在头靠垫 8，而双脚则踩踏于脚踏座 3 的踏板 32 上方，双手并分别握持把手杆 711，随即可双脚向后蹬而背部向后仰躺，令背靠垫 7 以其连接之后支架 6 下方枢轴 712 为支点向后枢转，并配合后支架 6 的两定位杆 62 连动拉伸弹性元件 50 而同时给予适当的运动阻力（参考图 6），进而达到背部、腰部与腿部等相关部位的运动效果；另外前述的运动，其中的双脚踩踏踏板 32 的动作亦可改为踹一只脚，而仅由另一只脚单脚踩踏踏板 32，如此除了前述背部、腰部、腿部相关部位可以具有运动效果以外，另增加臀部部位的运动效果（配合参考图 7）；再者，前述运动的双脚踩踏踏板 32 的动作亦可改为双脚踩踏在接近于脚踏座 3 的踏板 32 上方两侧 321，如此除了可达到背部、腰部、腿部相关的运动效果外，更可另增加腿部上方内侧部位的筋肉相关部位的运动效果（配合参考图 8）；又，当欲折叠收合时，可将穿设后支架 6 与背靠垫 7 的固定架 71 的插销 73 拔出，令背靠垫 7 向后支架 6 枢转角靠拢，另将穿设座垫 4 的支杆 41 与底架 1 的主支架 12 的插销 15 以及穿设脚踏座 3 与尾支架 2 的插销 25 拔出，即可将座垫 4 先向后枢转而将脚踏座 3 向后枢转并向底架 1 的主支杆 12 靠拢，再将座垫 4 枢转靠向该脚踏座 3，然后再将穿设支撑架 5 与底架 1 的主支杆 12 的插销 13 拔出，即可令支撑架 5 向底架 1 的主支杆 12 靠拢，随即可将前述座垫 4 连同后支架 6 向下收合靠拢，即完成一体积小而便于储放、包装、运输的收合折叠状态（参考图 5）。

再者，前述底架 1 的轴杆 11 两侧适当部位乃预设定位环 112，可配合钩设一橡胶拉力绳 10 的挂勾 101，令使用者可双手握持该拉力绳 10 的





把手 102 而配合做各种姿势的运动 (参考图 9~图 10)。

综上所述, 本实用新型可归纳具有下列增进功效:

1、使用者可坐于座垫 4 上方而背部倚靠背靠垫 7, 头部则靠在头靠垫 8, 而双脚或单脚踩踏于脚踏座 3 的踏板 32 上方预定部位, 双手并分别握持把手杆 711, 随即可双脚向后蹬而背部向后仰躺, 令背靠垫 7 以其连接的后支架 6 下方枢轴 712 为支点向后枢转, 并配合后支架 6 的两定位杆 62 连动拉伸弹性元件 50 而同时给予适当的运动阻力, 进而达到背部、腰部、臀部与腿部筋肉等相关部位的运动效果。

2、不须使用工具, 只要将各插销拔出即可方便地收合折叠, 收合后的体积小, 便于储放、包装或运输。

3、尾支架 2 的长度, 头靠垫 8 的高低位置皆可方便地配合不同使用者的需求而调整。

4、底架 1 的两侧可配合钩设一橡胶拉力绳 10, 令使用者可双手握持该拉力绳 10 的把手 102 而配合做各种姿势的运动。

## 说明书附图

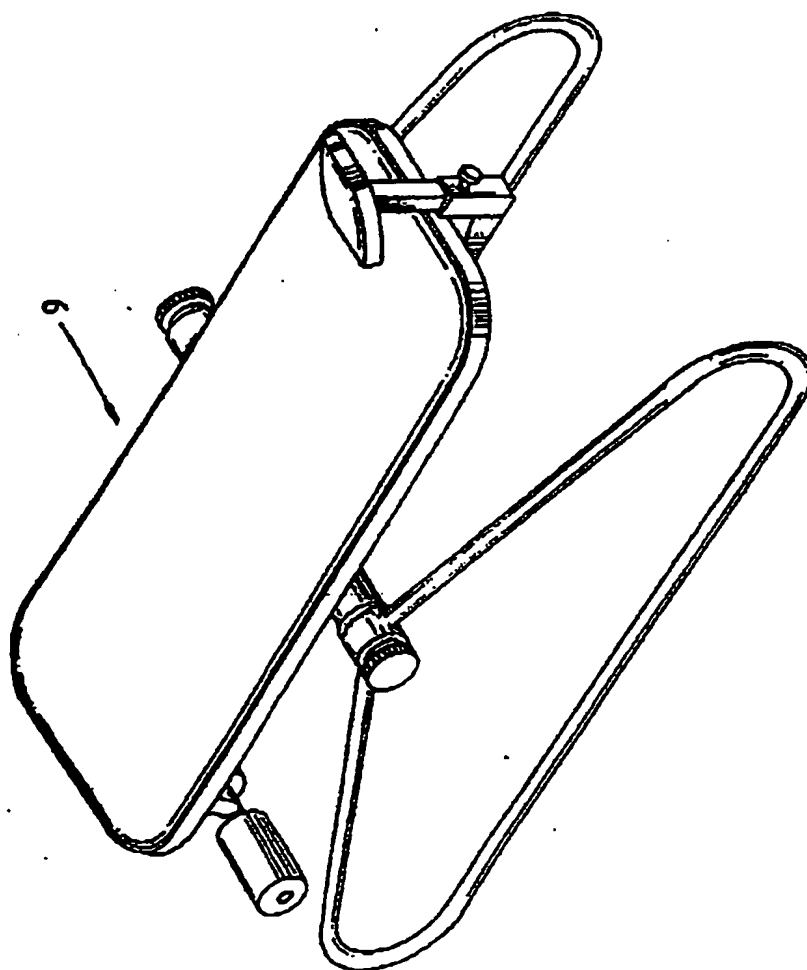


图1

0014

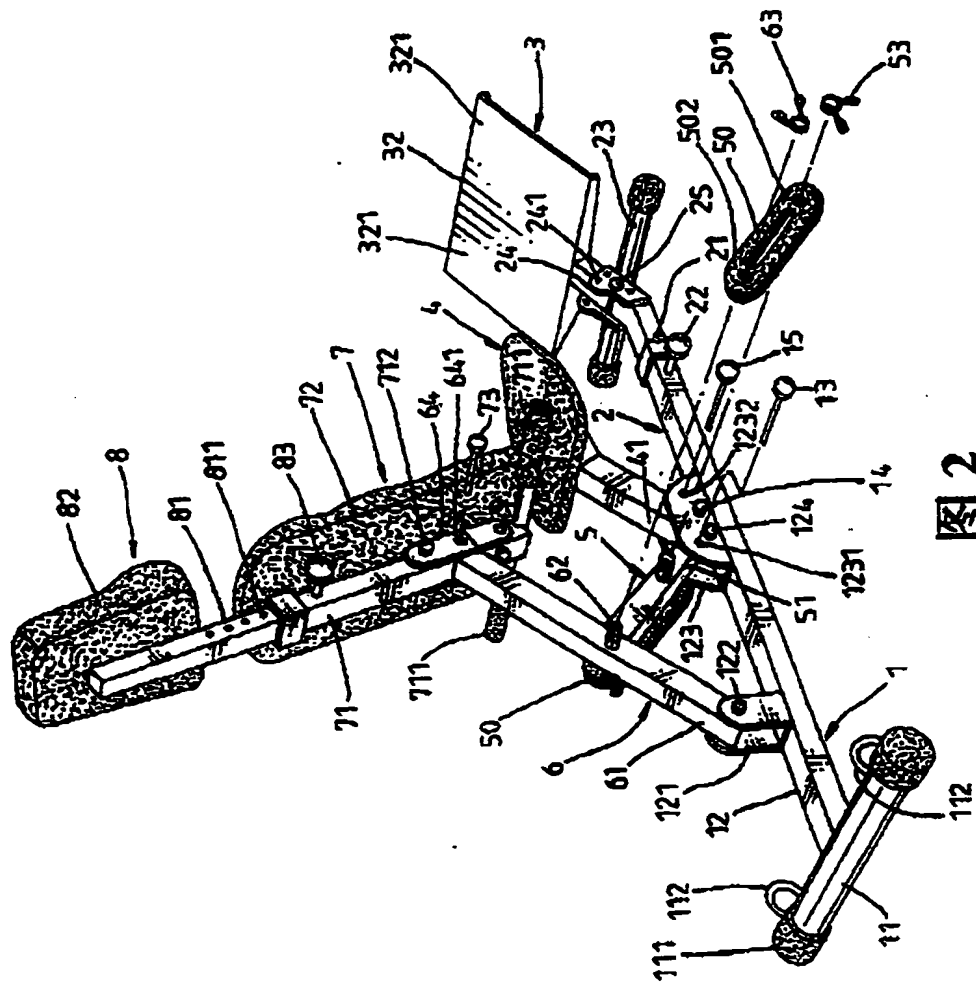
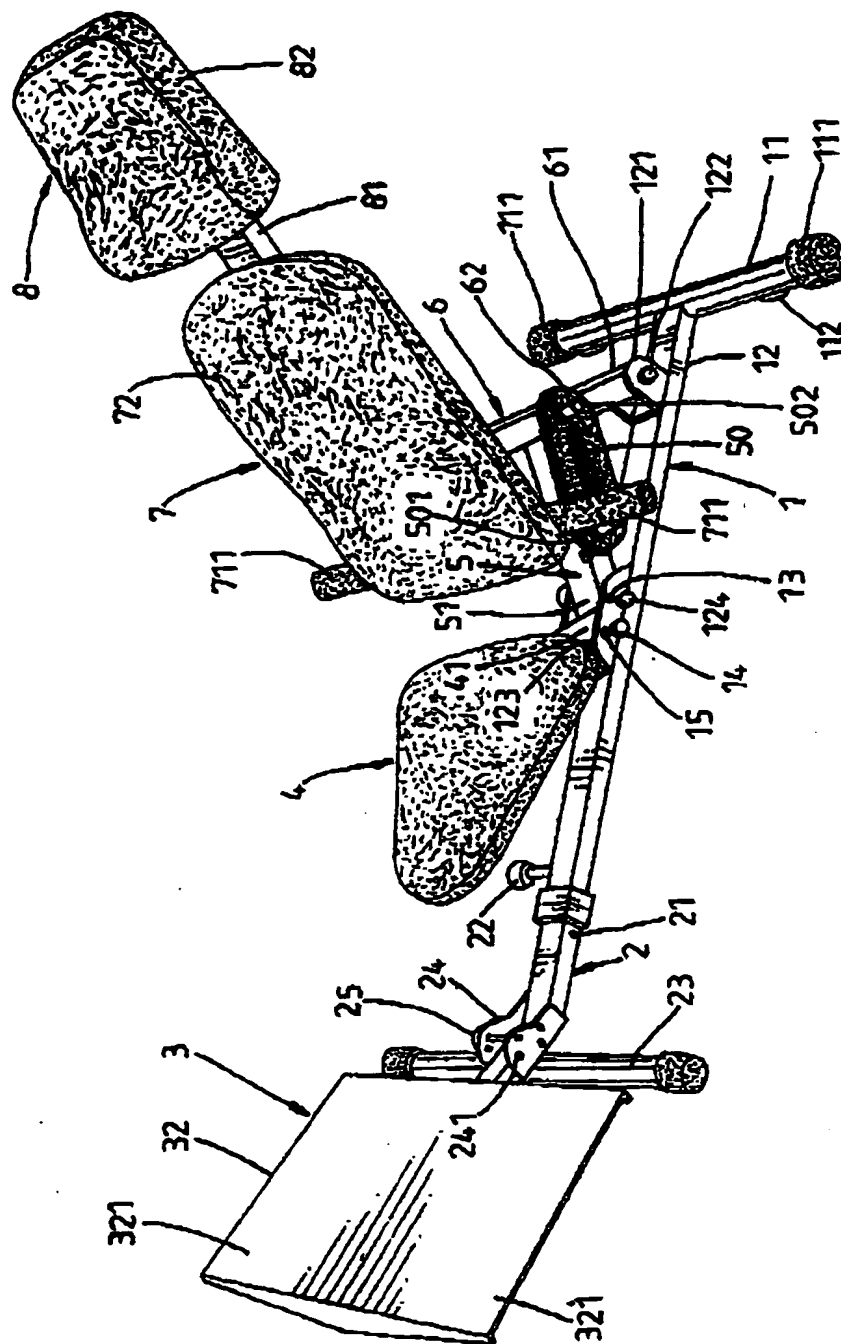


图 2



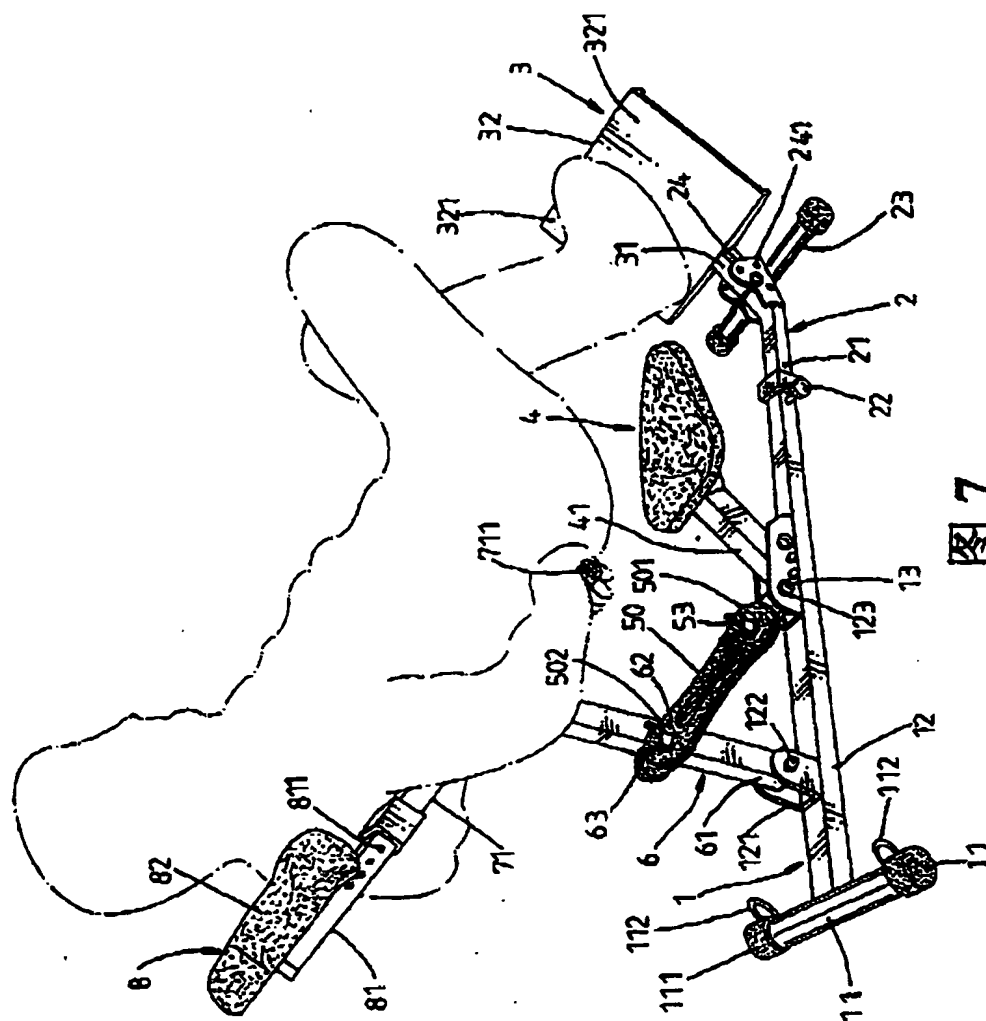


4  
[X]





0114





2001.14

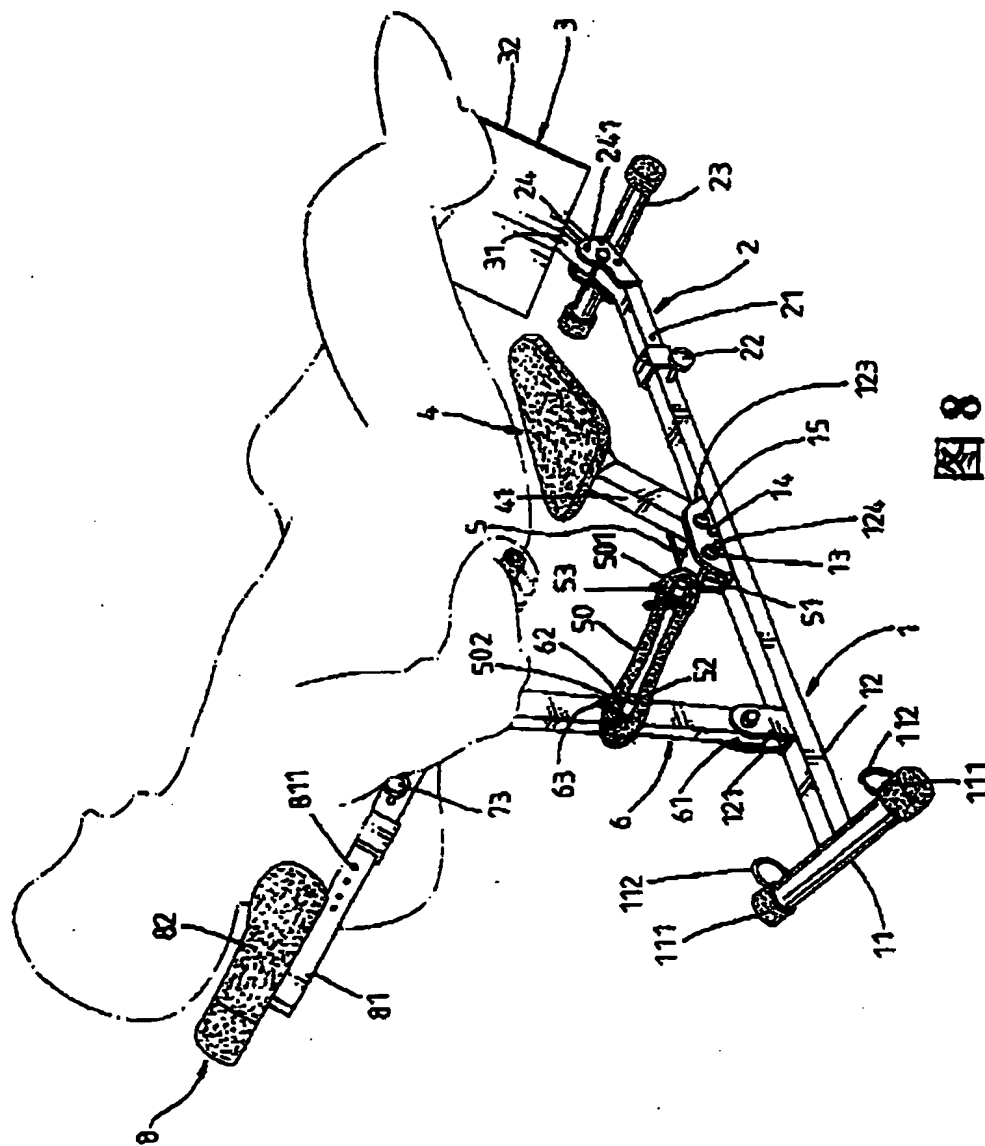
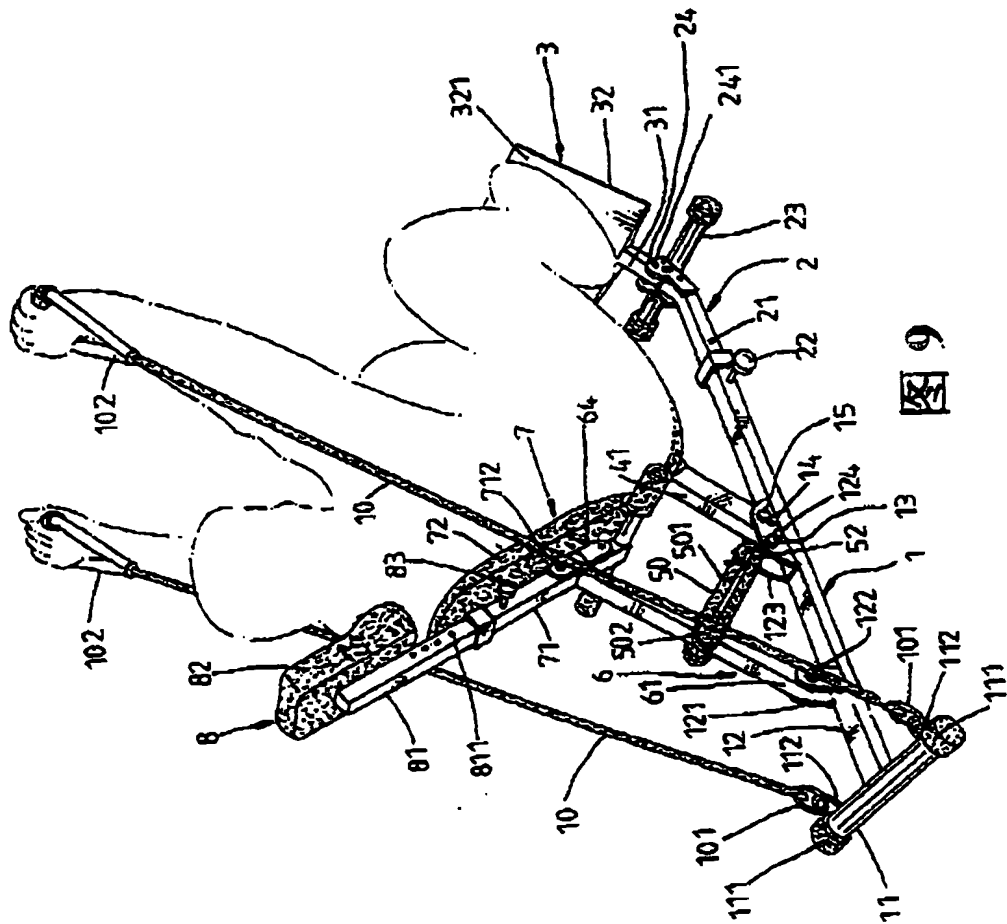


图 8



01.14

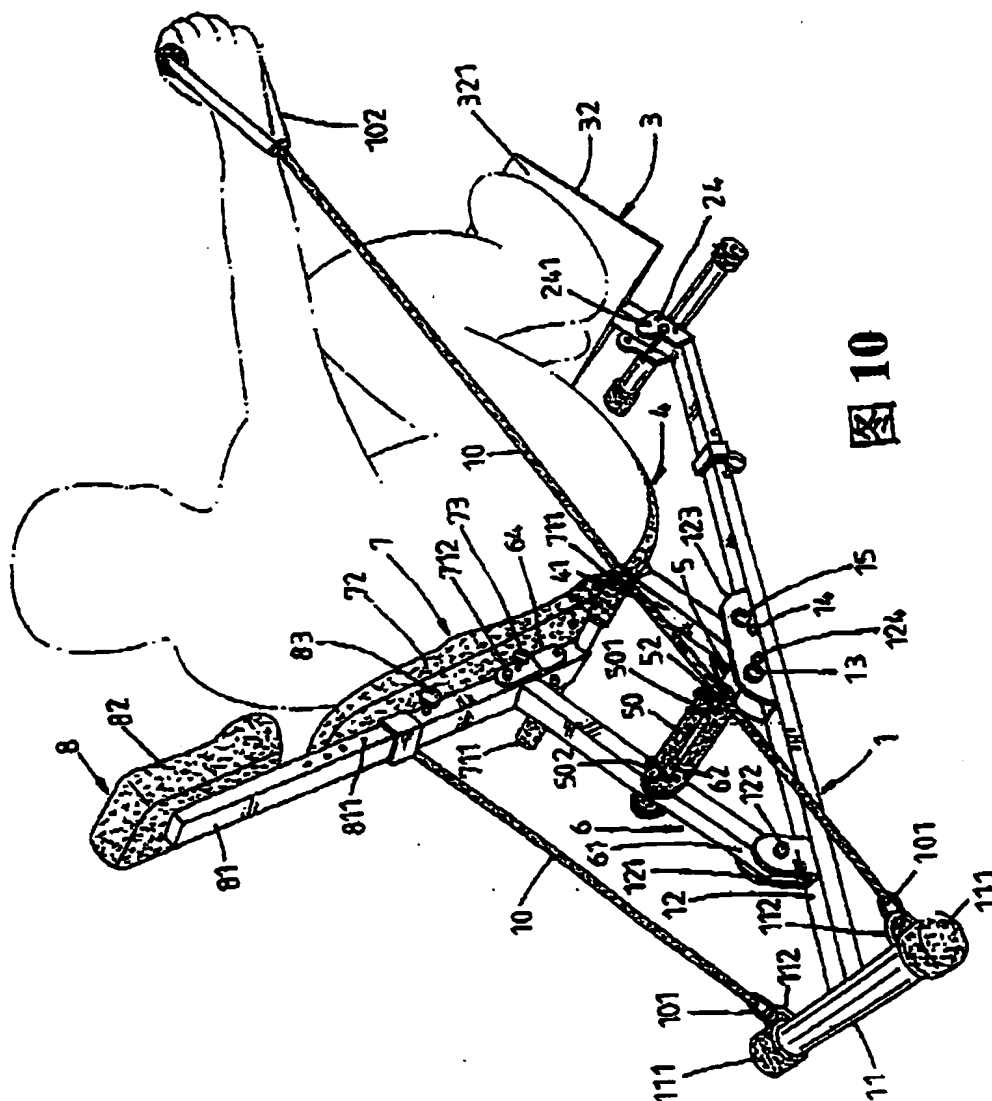


图 10

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**Description**

As shown in Figs.2-10, the new structure for exercising device according to the present utility model comprises the following:

A bottom frame 1 having a shaft lever 11 on one side thereof, a moveable wheel 111 being pivotally provided at each of both ends of the shaft lever 11, a main support rod 12 being vertically provided at and extending forwardly from the middle of the shaft lever 11, a tail support frame 2 being provided around the front side of the main support rod 12 and positioned together with the front side via an adjusting rod 22, a U-shaped seat 121 being pivoted to a lower end of a rear support 6 via a pivot shaft 122, a pivoting seat 123 is pre-provided on the main support rod 12, a lower end 51 of a support 5 being pivoted to one side of the pivoting seat 123 via a pivot shaft 124, a positioning hole 1231 being pre-provided on the pivoting seat so that the pivoting seat 123 is pivoted to the support 5 by insertion of a pin 13, the other side of the pivoting seat 123 being pivoted to a lower end of a support rod 41 of a seat cushion 4 via a pivot shaft 14, a positioning hole 1231 being pre-provided on the pivoting seat, a pin 15 being inserted into the positioning hole 1231 to connect the pivoting seat 123 to a support rod 41 of the seat cushion 4;

A tail support frame 2 having on one side thereof a plurality of positioning holes 21 and provided in the front side of the main support rod 12 of the bottom frame 1 an appropriate length, the tail support frame 2 being positioned together with the main support rod 12 by inserting an adjusting rod 22 into one of said positioning holes 21, an horizontal lever 23 being provided on the other end of the tail support frame 2, two pivoting walls 24 being provided over the rear side of the tail support frame 2, a lower end of a support rod 31 of a pedal seat 3 being positioned by inserting a pin 25 into one of a plurality of positioning holes 241 angularly pre-provided in the pivoting walls 24;

A pedal seat 3 being provided therebelow with the support rod 31 which can be

positioned together with the two pivoting walls 24 of the tail support frame 2 by inserting the pin 25 into one of the positioning holes 241 on the pivoting walls 24, a pedal 32 being provided over the pedal seat 3 and having an appropriate area for a user to select an appropriate position to tread to apply a force;

A seat cushion 4 being provided therebelow a support rod 41 at an appropriate angle, the lower end of the support rod 41 being pivoted to the other side of the pivoting seat 123 of the bottom frame 1, the support rod 41 being positioned together with the other side of the pivoting seat 123 by inserting the pin 15, the support 41 of the seat cushion 4 being positioned to form an appropriate angle;

A support frame 5 which lower end 51 is pivoted to one side of the pivoting seat 123 of the bottom frame 1 via a pivot axle 124, the support frame 5 being positioned together with one side of the pivoting seat 123 by inserting a pin 13 into a pre-set positioning hole 511, the support frame 5 forming an appropriate angle, a positioning rod 52 being provided on both sides of the upper end of the support frame 5 to respectively run through one end 501 of an elastic element 50 to secure said elastic element, the elastic element being positioned via an elastic clip 53;

A rear support 6 which lower end 61 is pivoted to the U-shaped seat 121 of the main support rod 12 of the bottom frame 1 and which upper end is positioned together with a fixing rod 71 of a back cushion 7 by inserting a pin 73 into a hole 641 of a pivoting wall 64, a positioning rod 62 being provided on each side of the rear support to run through the other end 502 of the elastic element 50 to position the elastic element via an elastic clip 63;

A back cushion 7 which front side is provided with a back pad 72 and which rear side is connected to a fixing rod 71, a handle rod 711 being provided on each side of a lower end of the fixing rod 71, the fixing rod 71 being pivoted to the upper end of the rear support 6 via a pivot axle 712, the fixing rod is connected to and positioned together with the rear support 6 by inserting a pin 73 through the pivoting wall 64 of the rear support 6, the back cushion 7 being rendered to form an appropriate angle;

A head cushion 8 which front side is a head pad 82 and which rear side is connected to a support rod 81, a plurality of perforations 811 being provided on the

support rod 81, the support rod 81 being provided into the interior of the fixing rod 71 of the back cushion 7 a predetermined length, the support rod 81 being positioned by inserting an adjusting rod 83 into one of the perforations 811.

In view of the above configuration including the above components, a user can seat on the seat cushion 4 with back against the back cushion 7, head against the head cushion 8, feet stepping on the pedal 32 of the pedal seat 3, and with both hands gripping the handle rods 711, whereby the feet kick rearwardly and the user's back leans backwardly so that the back cushion 7 pivots backwardly about the pivot axle 712 at the upper end of the rear support 6 connected to the back cushion, and the elastic element 60 is pulled through the linkage with the two positioning rods 62 of the rear support 6 and meanwhile an appropriate motion resistance is endowed (see Fig.6) so that exercise effects of related body parts such as the back, the waist and legs are achieved. Besides, the action of both feet stepping on the pedal 32 can be changed into the action of one foot being lift up and the other stepping on the pedal 32. In this way, besides that exercise effects of related body parts such as the back, the waist and legs are achieved, the user's bottom can also be acted upon (see Fig.7). In addition, the previous action of both feet stepping on the pedal 32 can be changed into the action of both feet stepping close to both sides of the upper portion of the pedal 32 of the pedal seat 3. In this way, besides that exercise effects of related body parts such as the back, the waist and legs are achieved, body parts such as muscles on the inside of the upper portion of the legs can be acted upon (see Fig.8). Furthermore, when the exercising device needs to be folded, the pin 73 running through the rear support 6 and the positioning rod 71 of the back cushion 7 is drawn out so that the back cushion 7 comes closer to the pivoting angle of the rear support 6, and the pin 15 running through the support rod 41 of the seat cushion 4 and the main support rod 12 of the bottom frame 1 and the pin 25 running through the pedal seat 3 and the tail support frame 2 are drawn out so that the seat cushion 4 is pivoted backwardly first and the pedal seat 3 is pivoted backwardly to come closer to the main support rod 12 of the bottom frame 1, and then the seat cushion 4 is pivoted towards the pedal seat 3, then the pin 13 running through the support 5 and the main support rod 12 of the

bottom frame 1 is drawn out so that the support 5 comes closer to the main support rod 12 of the bottom frame 1, whereupon the seat cushion 4 together with the rear support 6 is folded downwardly so as to in a folded state wherein the device is smaller in size and easy to store, package and transport (see Fig.5).

In addition, a positioning ring 112 is provided at an appropriate position of each side of the shaft lever 11 of the bottom frame 11, and a hook 101 is provided to cooperate with said positioning ring and a rubber rope 10 is attached to said hook so that a user can grip a handle 102 of the rubber rope 10 to do various actions (see Figs.9-10).

To sum up, the present utility model can have the following improvements:

1. A user can seat on the seat cushion 4 with back against the back cushion 7, head against the head cushion 8, both feet or one foot stepping at predetermined positions on the pedal 32 of the pedal seat 3, and with both hands gripping the handle rods 711, whereby the feet kick rearwardly and the user's back leans backwardly so that the back cushion 7 pivots backwardly about the pivot axle 712 at the upper end of the rear support 6 connected to the back cushion, and the elastic element 60 is pulled through the linkage with the two positioning rods 62 of the rear support 6 and meanwhile an appropriate motion resistance is endowed so that exercise effects of related body parts such as muscles at the back, the waist, the bottom and legs are achieved.

2. The exercising device can be folded up conveniently by drawing out the related pins without aid of any tools, and the device in the folded state is small in size and easy to store, package or transport.

3. The length of the tail support frame 2 and the height of the head cushion 8 can be conveniently adjusted to meet the needs of different users.

4. A rubber rope 10 can be provided at the each side of the bottom frame 1 in combination with the hook so that the user can grip the handle 102 of the rubber rope 10 to do various actions.